

Faculty Development Teaching Grant Application

1. Name Cindy Iavagnilio Signature _____
2. Title Assistant Professor, Nursing Department Nursing
3. Campus Address Havican Hall 15C Phone 284-4682
4. Home Address 53125 Cobus Oaks Dr. Elkhart, IN 46514 Phone 674-5553
5. Proposal Title

Integrating a new Simulation Framework into the nursing curriculum

6. Education

Master of Science in Nursing
Area Specialized: Nurse Anesthesia,
Edinboro University, PA

7. References: Name of recommender

Dr. Linda Zoeller

8. Departmental Endorsement:

Please have your department chair sign the following statement:

I have read this proposal and consider that it is consistent with the interests of the department and the College.

Endorsing Chair _____
Department _____ Date _____

9. Experience:

Indicate positions you have held, activities you have participated in, prior publications, exhibits, or recitals that are relevant to your project.

For the last four years I have been the instructor for N224 Essentials of Nursing. This course is taught at the sophomore level, is a six credit course consisting of 4 hrs of theory, and 6 hours of lab/clinical experience each week. With this course comes the responsibility of also being the clinical lab director/coordinator. I am responsible for maintaining the equipment, ordering lab supplies used for the instruction and practicing of nursing skills. I have been responsible for researching and involved in the decision making to purchase new educational interactive software, audio/visual learning tools purchasing new educational software, and other audio visual learning tools and which have included simulation tools.

- Attended the Indiana Wesleyan Simulation conference on Nov, 16, 2007 – “Integrating Simulations into the Nursing Curriculum” presenter Pam Jeffries.
- Attended the 39th Biennial Sigma Theta Tau International Convention in Baltimore, MD on Nov. 3-7, 2008. Attending several speaker meetings related to simulation

10. The proposal narrative: Please write to a general academic audience and limit your proposal to **no more than five double-spaced pages**. Include the following:

- 1.) A brief, descriptive title
- 2.) An explanation of the project, including:
 - a. Specific aims
 - b. Method
 - c. Significance of the project (include how the project will enhance your teaching abilities and how it will contribute to curricular development in your department and at Saint Mary's).
 - d. Previous work that you have done on this or closely related projects. (Include courses you have taught, positions you have held and activities you have participated in that are relevant to your project.)
 - e. If applicable, a list of no more than ten pertinent bibliographical references

11. Other funding:

- a. Do you have other financial support for this project?

Yes No

If yes, list:

The Nursing department, with the assistance of donor monies, has recently purchased their first high-fidelity *SimMan Patient Simulator*. I have been granted approximately 4 hours a week release time from V.P. Patricia Fleming during the spring 2008 semester. The purpose for this release time is to complete the initial training on the basics of assembling, operating and programming the high fidelity simulators. This time will also be spent to begin the development of a plan for successful integration of simulation into the nursing curriculum.

- b. Have you attempted to obtain support for the project from sources other than this fund?

Yes No

- c. Have you previously applied for an SMC Faculty Development Grant?

Yes No

12. Date on which the work will begin:

Summer/Fall of 2008 – My teaching contract at present is for Spring/Summer (Accelerated Program)

The Committee wishes to make successful proposals available to serve as models for other faculty interested in applying for development grants. If your proposal is funded, may we use it? Yes No

Title

Integrating a New Simulation Framework into the nursing Curriculum

The specific aim of this proposal is to

- Develop a plan to align the use of clinical simulations with the course objectives, beginning with N224 Essentials of Nursing.
- Develop the use of clinical simulation for not only teaching but purposes of assessment to determine whether students are meeting learning outcomes

The method for implementing clinical simulation into N224 will include the following:

- Attend simulation conferences and workshop to develop the knowledge and understanding of simulation and begin networking with other faculty using clinical simulation (April. April 18th conference in South Bend, Presenter Pam Jeffries – “*Surviving in a Simulated World: Practice, Education and Research*”
- Attend a 2-day basic training course at Laerdal Training Center in New York. Assembly and Operation of the simulators interface, learn to plan and program scenarios using an instruction design process.
- Site Visits to other simulation labs in the region (IUSB, Valparaiso University, Goshen College, St Francis in Fort Wayne)
- Develop and pilot test 2 clinical simulation encounters during the fall semester. Utilize student and faculty feedback to assist with evaluation of this pilot test
- Use the “Nursing Education Simulation Framework” – developed for and initially tested through the National League for Nursing/Laerdal Simulation Study (Jeffries, 2005) to integrate simulation into N224 Essentials of Nursing. .

Significance of the Project:

Nurse educators are facing great challenges today in keeping up with the demands required to prepare nursing graduates for the 21st century health care practice. Health care environments are complex and they require high-tech, problem solving, and decision-making skills as well as a strong knowledge background. The current academic environment is faced with exploding student enrollment, limited availability of clinical sites and faculty shortages. The infusion of technology in education and diminished financial resources are additional challenges facing nursing education. Yet one thing remains the same; the goal of nursing education is to prepare practitioners who are capable of delivering safe and effective health care to patients.

The current generation of learners demands innovative engaging strategies to acquire knowledge. This paradigm shift from teacher-centered to learner-centered education has led many academic nursing programs to explore innovative models and ways to increase students' clinical diagnostic skills. Nursing faculty are increasingly designing, using and implementing the use of high fidelity patient simulators and PC-based virtual patients as strategies to better educate nursing and other health professional students.

Simulation resembles reality. In specific reference to health care, simulation is an attempt “to replicate some or nearly all of the essential aspects of a clinical situation so that the situation may be more readily understood and managed when it occurs for real in clinical practice” (Morton, 1995). However, it is not enough for nurse educators to include simulation in their courses because it is popular, available or “trendy”. It is important to use simulation for its advantages related to student learning. Students can be offered an opportunity to practice many aspects of the nursing role, from simple skills and procedures to management of complex situations.

Clinical simulation labs allow the learner to have fully immersive, simulation experiences in a safe environment. It provides for a wide range of experiences that are either too rare or too risky for novices to engage in using actual patients. Often, even if a student does encounter certain situations such as respiratory arrest or a dying patient, the student is expected to observe or take a secondary role rather than being involved in any action or decision-making. With simulation, the student or team of students can assume responsibility for managing a situation without the risk of error or harm to a patient. The students are allowed to make their own decisions, and see the consequences of their actions in a controlled environment.

Research has shown the students involved in active learning retain knowledge longer (Johnson et al) and simulated learning is active learning. Students report that once they are accustomed to simulation experiences, they experience a decreased level of performance anxiety and a heightened sense of self-confidence in their psychomotor skills and critical thinking abilities (Jamison, Hovanscek and Clochesy). Others reported being more excited about learning, learning more, and actually looking forward to learning when well-crafted simulations are utilized. Faculty report satisfaction with this teaching strategy and indicate a renewed excitement about their teaching role. Finally, other faculty and students report being more engaged with each other when simulation is used.

Within nursing education, simulation will never fully replace real contextual human patient care experiences; however, it provides a reasonable facsimile to patient care as a valued adjunct to less-than-predictable patient care experiences.

Previous Work – see #9 Experience